

HTML: Section 6 ~ Frames

What are frames?

- they allow designers to display information in rectangular boxes on the screen
- the frameset document isn't displayed in the browser it simply tells the browser which pages to display and how to lay them out. The title of the frameset document, however, is displayed in the browser's title bar as usual.

Example:

- one frame could display a table of contents with a list of hyperlinks that you could click
- a second frame could contain the information that corresponds to what you selected. The advantage is that the table of contents would always be visible, even while viewing a larger document in the other frame.

Tags for Frames

1. `<frame src = "filename.html" name = "framereferencename">`

This establishes the content of a frame with the SRC attribute, and the name to be used if you need to refer to the frame elsewhere.

****NOTE:** Do not close the frame tag.

2. `<frameset></frameset>`

These tags are used to contain the frame structure. Between these tags, you will lay out the rows and columns that you want to see and include the `<frame>` tags to hold the documents.

Example:

```
<html>
<head>
  <title> Frames Demo 1 </title>
</head>
<frameset rows = "50%, 50%">
  <frame src = "demo1.html" name = "frame1">
  <frame src = "demo2.html" name = "frame2">
</frameset>
</html>
```

****Note:** There is no `<body></body>` tag pair in this script. The `<frameset>` pair replaces the `<body>` pair.

Column and Row Settings

A. Fixed Values

ie) `<frameset rows = "20, 400">`

B. Percentages

ie) `<frameset cols = "25%, 50%, 25%">`

C. Wildcards

ie) `<frameset cols = "3*, *, 2*">`

****Unless you know that all visitors to your web pages will be using a particular resolution, avoid specifying exact dimensions for all frames because they may have a difficult time viewing it.**

Some examples:

`<frameset rows = "50%, 50%">`

This will create two rows, each occupying half of the available space in the browser window.

`<frameset cols = "*", 3*">`

This will divide the available space into two pieces with the second one being three times bigger than the first one.

Attributes for Frames

1. `frameborder` ~ if you do not want a border, you can set frame border value to zero

ie) `<frame src = "title.html" name = "frame0" frameborder = "0">`

2. `noresize` ~ to avoid the user resizing your frames, include this in the frame tag

ie) `<frame src = "body.html" name = "main" noresize>`

What does each part of this script mean?

<code><frameset rows</code>	opens the frameset tag and says there will be rows
<code>= "50%, 50%"></code>	says that there will be two rows, each occupying half of the available space in the browser window
<code><frame</code>	marks the beginning of the information for the top row
<code>src = "demo1.html"</code>	says that the first row will contain the document called demo1.html
<code>name = "frame1"></code>	indicates the name to use to refer to this frame later
<code><frame src = "demo2.html"</code> <code>name = "frame2"></code>	this lists the corresponding information for the second row which will display a second HTML document
<code></frameset></code>	closes the frameset

Using Rows and Columns Together

Nested Framesets ~ when you have one frameset within another
~ necessary when you want to combine rows and columns

Example:

```
<html>
<head>
  <title> Nested Example </title>
</head>
<frameset rows = "*", 6*">
  <frame src = "lab1.html" name = "frame0">
    <frameset cols = "*", 3*">
      <frame src = "lab2.html" name = "frame1">
      <frame src = "lab3.html" name = "frame2">
    </frameset>
  </frameset>
</html>
```

**The first row is defined first ~ it has a document source (lab1.html).

**The second row contains the columns and is defined second. The columns contain the document sources: lab2.html and lab3.html.

Frames, Anchors and Table of Contents

- a common use for frames is to present a fixed title and a table of contents that can be used to access different parts of a large document displayed in the largest of the three framesets
 - this requires the use of anchors within the large document
- generally, you need four documents:

1. The Frameset Document

The frameset document sets up the frame which holds all of the html documents.

Example:

```
<html>
<head>
  <title> Frameset Document </title>
</head>
<frameset rows = "*", 5*">
  <frame src = "exheader1.html" name = "frame0">
  <frameset cols = "*", 3*">
    <frame src = "extoc1.html" name = "frame1">
    <frame src = "exmain1.html" name = "frame2">
  </frameset>
</frameset>
</html>
```

2. The Header File for the Document Title

The header file is used to create a page heading including color and large font.

Example:

```
<html>
<head>
  <title> Header File </title>
</head>
<body bgcolor = "blue">
  <h1> Title </h1>
</body>
</html>
```


3. The Table of Contents

The Table of Contents contains the references to other documents or anchor points within the current document or another local document. The important point is that references from the Table of Contents in one frame window will cause changes in the display of a different window.

Example:

```
<html>
<head>
  <title> Table of Contents </title>
</head>
<body bgcolor = "green">
  Table of Contents <hr><br>
  <base target = "frame2">
  <a href = "exmain1.html#first"> First Section </a><br>
  <a href = "exmain1.html#second"> Second Section </a><br>
  <a href = "exmain1.html#third"> Third Section </a><br>
</body>
</html>
```

Target

- ☐ You can also include the target within each link if you want a different target for each (rather than a base target which sets the same target for all links)
- ☐ ie) First Section

4. The Main Document

In order to have the Table of Contents frame reference various spots in a large document, you must create anchors within the big document.

Example:

```
<html>
<head>
  <title> The Main Document </title>
</head>
<body bgcolor = "red">
  <h1> Document Heading </h1><br>
  <br>
  <a name = "first"></a>
  <b> First Section </b><br>
    This should contain a lot of text in order for the Table of Content to be
useful. <br>
  <br>
  <hr>
  <a name = "second"></a><br>
  <b> Second Section </b><br>
    This should also contain a lot of text.<br>
  <br>
  <hr>
  <a name = "third"></a><br>
  <b> Third Section </b><br>
    A lot of text goes here as well. <br>
  <br>
  <hr>
</body>
</html>
```